

REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

An interview was conducted among the Examiner, the Supervisory Patent Examiner (SPE), and Applicants' representative on September 21, 2006. Based on the discussions during the interview, the claims have been amended herein to address the interpretations of the claims posed by the Examiner and SPE. As discussed in detail below, it is submitted that the claims as amended herein are allowable over the prior art of record.

Claims 9, 10, 13-18, and 21-30 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ando. This rejection is traversed and, furthermore, is inapplicable to the claims as amended herein.

Claim 9 as amended recites an optical head device comprising a light source (e.g. 1 Fig. 1), focusing means (e.g. 8), aberration detection means (e.g., 12), wavefront converting means (e.g. 4) which is driven in such a manner to reduce aberration, and output controlling means for controlling the light source so as to control the output of light outputted by the light source wherein the output controlling means controls the light source so as to control the output of light outputted by the light source based on the driving amount to be inputted to the wavefront converting means and learned data (which is data indicating a relation between a driving amount and output of the light source).

Based on the discussion during the September 21 interview and the Office Action, the Examiner considers one or more of the hologram element 21 (see OA page 2, item 2) or the beam splitter 30, photodetector 90A, and one or more of the controllers on the lower right of Fig. 6 of Ando (see OA page 9, item 5) to meet this limitation. The Examiner interprets the previous claim language "controlling output" as encompassing the broad concept of controlling light output from the entire optical system. Accordingly, as suggested by the SPE during the interview, the claims have been amended to explicitly state that "the light source" is controlled rather than that the "output" of the light source is controlled.

Neither the hologram element 21 nor any of the optical elements or controllers in shown in Fig. 6 of Ando control the light source (laser source 10), but only control the light exiting the overall system.

In item 5 of the Office Action, the Examiner states that Ando teaches in paragraphs 66-68 “that the servo system that drives the aberration amount drives the power of the light to be changed through the light sending system.” Moreover, the Examiner states that “Yoshida also teaches in the abstract the same concept of using a wavefront converting element to change the power of a light based on aberration.” This concept referred to by the Examiner is not being claimed. In addition to the claimed wavefront converting means which is driven to reduce aberration, claim 9 also recites that the output controlling means controls the light source as discussed above. Even if Ando and Yoshida teach controlling the power of light as indicated by the Examiner, these references do not disclose or suggest controlling the light source so as to control the output of light outputted by the light source as recited in claims 9, 16, and 17. Again, please refer to Fig. 6 of Ando, which clearly shows the laser source 10 with no suggestion that the laser source 10 (or hologram element 21) is controlled.

Additionally, claim 9 recites that the “output controlling means stores holds learned data” and “controls the light source so as to control the output of light outputted by the light source based on the driving amount to be inputted to the wavefront converting means and the learned data.” Similar recitations are found in claims 16 and 17.

The Examiner equates elements 50, 52, and 54 of Ando to the claimed wavefront converting means (see Office Action page 2, item 2) and refers to paragraphs [233] and [391] of Ando (see first line of page 3 of Office Action). The Examiner seems to be asserting that the detection optical system (30/90A and related controllers discussed above) extracts some information according to which some adjustments are made by controlling the elements 50, 52, and/or 54 for e.g., defocusing correction, layer thickness correction, etc.

However, the system of Ando does not control the light source 10 based on the driving amount to be inputted to any of elements 50, 52, 54 or based on any learned data (which indicates a relation between a driving amount and the output of the light source). As discussed above, the

system of Ando does not control the light source 10 at all. Rather, based on information extracted via the beam splitter 30, some controlling of elements downstream from the light source in the optical system (e.g., 50, 52, 54) is performed to make various corrections. Moreover, Ando does not disclose or suggest the claimed learned data.

At least for the above reasons, claims 9-30 are not anticipated by Ando and are allowable over the prior art of record.

Claims 11 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Itou. Also, claims 12 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ando in view of Yoshida. These rejections are traversed.

Neither of the secondary references, Itou and Yoshida, resolves the lack of disclosure or suggestion of the inventions recited in independent claims 9, 16, and 17 discussed in detail above. Therefore, it is submitted that the inventions of such dependent claims would not result from any of the proposed combination of references, and as such would not have been obvious to a person having ordinary skill in the art at the time the present invention was made.

In view of the above amendments and remarks, it is submitted that the present application is in condition for allowance. The Examiner is invited to contact the undersigned by telephone to resolve any remaining issues.

Respectfully submitted,

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October 26, 2006